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2 **CLAIMS:**

3 What is claimed is:

Sub B, 7 1 1. An apparatus for retrieval of storage units from a  
2 library, the apparatus comprising:

3 a first center column having a first arm with first  
4 and second ends wherein the first end of said first arm  
5 is attached to said first center column and said first  
6 arm extends substantially radially outward from said  
7 first center column;

8 a first hand attached to the second end of said  
9 first arm for manipulating storage units from the  
10 library;

11 a second center column having a second arm with  
12 first and second ends wherein the first end of the second  
13 arm is attached to the second center column and said  
14 second arm extends substantially radially outward from  
15 said second center column; and

16 a second hand attached to the second end of said  
17 second arm for manipulating storage units from the  
18 library; wherein

19 said first arm and said second arm rotate about a  
20 same vertical axis of rotation; and

21 each arm and hand is independently moveable from the  
22 other arm and hand.

1 2. The apparatus of claim 1, wherein said first center  
2 column is attached at one end to a ceiling of the library

and said second center column is attached at one end to a floor of the library.

1 4. The apparatus of claim 1, wherein each of said  
2 center columns is substantially cylindrically symmetric.

1     6.     The apparatus of claim 1, wherein the library  
2     comprises walls arranged around a central axis and the  
3     storage units are stored in cells in the walls.

1 7. The apparatus of claim 1, wherein each of said  
2 center columns is substantially cylindrical.

1 8. A data tape storage and retrieval system,  
2 comprising:  
3 a plurality of storage cells arranged radially  
4 around a central point, wherein the plurality of storage  
5 cells are configured to receive data storage objects;  
6 a first rotational horizontal beam rotatable around  
7 the central point;  
8 a second rotational horizontal beam rotatable around  
9 the central point;

10 a plurality of vertical supports, one of said  
11 vertical supports attached to one end of each of said  
12 rotational horizontal beams;

13 a plurality of gripping means configured for  
14 gripping data storage objects to be retrieved from said  
15 plurality of storage cells; and

16 means for movably attaching at least one of said  
17 gripping means to traverse each of said vertical  
18 supports; wherein

19 each of said rotational horizontal beams is capable  
20 of rotation independent of the rotation of the other of  
21 said rotational horizontal beams.

1 9. A data storage and retrieval system comprising:

2 a polygonal array of cells, wherein the polygonal  
3 array of cells are inwardly disposed with openings  
4 configured to receive data storage units;

5 a first robot unit, located within the polygonal  
6 array of cells, wherein the first robot unit transports a  
7 data storage unit to and from the polygonal array of  
8 cells; and

9 a second robot unit, located within the polygonal  
10 array of cells, wherein the second robot unit manipulates  
11 data storage units placed in the polygonal array of cells  
12 independently of the first robot unit.

1 10. The data storage and retrieval system of claim 9,  
2 wherein the data storage units are electronic magnetic  
3 storage cartridges.

66027-12575460





Docket No. 99-049.050-MIS

1 20. The apparatus of claim 15, wherein each of said  
2 center columns is substantially cylindrical.

1 21. A data tape storage and retrieval system,  
2 comprising:

3 a plurality of storage cells arranged radially  
4 around a central point;

5 a first rotational horizontal beam rotatable around  
6 the central point;

7 a second rotational horizontal beam rotatable around  
8 the central point;

9 a plurality of vertical supports, one of said  
10 vertical supports attached to one end of each of said  
11 rotational horizontal beams;

12 a plurality of gripping means for gripping data  
13 storage objects to be retrieved from said plurality of  
14 storage cells; and

15 means for movably attaching at least one of said  
16 gripping means to traverse each of said vertical  
17 supports, wherein each of said rotational horizontal  
18 beams is capable of rotation independent of the rotation  
19 of the other of said rotational horizontal beams.

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